

New Species and Records of Lepidoptera from the Three Kings Islands, New Zealand.

By J. T. SALMON, D.Sc., F.R.E.S., Entomologist,
Dominion Museum.

A small collection of Lepidoptera made on the Three Kings Islands by Mr. E. G. Turbott, of the Auckland Museum, during April and May of 1946, was kindly passed over to me for study. It contained three new species and one new sub-species, each of which, with two exceptions, are represented by the type specimen only; but as they are from a locality that is so seldom visited, I have decided to describe and figure them in order that future visitors who land on these islands may look out for additional specimens of these unique moths. A more concentrated attempt to collect Lepidoptera on the Three Kings may quite possibly yield further unusual species.

Porina unimaculata n. sp. Pl. 60, fig. 1.

The expansion of the wings is 60 mm. The general colour of the wings and body is a medium tone of brown; the hind wings slightly lighter in tone than the forewings, more of a greyish-brown, tinged, when fresh, with reddish-orange towards base and along the costa. Forewings with the costa almost straight, a *conspicuous white diamond-shaped discal spot*, a very small sub-costal white spot outlined in dark-brown about one-quarter from base, a second similar spot below this, a little more than the distance the sub-costal spot is from the costa, but a little nearer the base, and a pair of similar spots slightly basal to the centre of the dorsum; the *lower spot of this pair is on one end of a black crescent-shaped mark* which curves in towards the dorsum; there is an irregular and indistinct broad, dark-brown median band and a further similar distal band containing some irregular minute white dots; this band follows the curve of the tornus and dorsum and may meet the black, crescent-shaped mark; the sub-terminal line is faint, consisting of a series of narrow dark-brown patches. The veins on the hind wings are picked out with ochreous, and the cilia of both fore and hind wings are brown.

The antennae have the distal margin of each segment expanded into a distinct collar which bears a circlet of short stiff hairs. This distinct species is described from a unique specimen captured by Mr. Turbott at light on Great Island, Three Kings.

Type: In the Auckland Museum collection,

Heliostibes bilineata n. sp. Pl. 60, fig. 3.

The expansion of the wings is 15 mm. The forewings are somewhat rectangular in shape, on the distal half, with the costa strongly arched to the base; dark-brown in colour with a cloudy blackish spot at centre and another at two-thirds; *between these two spots from the costa almost to the dorsum runs a broad band of whitish scales superimposed upon the ground of dark-brown; beyond the distal blackish spot is a second similar whitish line; these two lines are inclined towards one another and may be joined by a thin line above the dorsum giving the appearance of a broad "U"-shaped band.* There is a small tuft of whitish scales basally on the costa and another on the dorsum. Bright-orange scales are sparsely scattered over the entire forewings and impart a pleasing bronzy reflection to them. Hind wings dark-brown with the costa broadly white basally, narrowing towards apex, and *shaded with bright orange-yellow from the base almost to the centre.*

Cilia of the forewings dark-brown, of the hind wings ochreous-brown shaded with dark-brown at the base. Head and thorax heavily scaled; patagia small, dark-brown. Body entirely dark-brown above with transverse intersegmental bands of bright-orange across the abdomen; below it is profusely shaded with whitish scales. Legs, antennae, and palpi dark-brown similarly shaded with whitish scales.

Locality: Great Island, Three Kings Group, from flowering kanuka trees.

Type and paratypes in Auckland Museum Collection; paratypes in Dominion Museum Collection.

Lysiphragma argentaria n. sp. Pl. 60, fig. 2.

One perfect specimen of this species was captured on Great Island at light by Mr. Turbott. It is a very small moth rather unlike any of the three known species of *Lysiphragma*; but by the nature of the palps and wing venation it falls into this genus.

The expansion of the wings is 12 mm. The general colour is silvery white on the forewings and head; pale-grey on the thorax, with patagia whitish; pale-ochreous white on the abdomen and silvery-grey on the hind wings, with strong metallic reflections. The forewings are clouded with scattered grey scales along the costa from the base to about three-quarters; there is an apical cloudy-grey patch and a similar sub-apical patch on the tornus; basal streak marked by a line of yellowish-orange scales terminated by two or three very dark-brown scales. Cilia of the forewings pale-brown, of the hind wings silvery-grey. The costa of the forewings is gently arched, the dorsum almost straight, the apex rounded and acute. Antennae dark-brown banded with white; palpi brown shaded with white. Head and thorax heavily scaled. Legs greyish-white.

Type: In the Auckland Museum Collection.

Ctenopseutis obliquana Walker subsp. **distincta** nov. Pl. 60, fig. 4.

This outstanding and unusual form of this well-known species is sufficiently unique in appearance combined with its geographical isolation on the Three Kings Islands to warrant the erection of a sub-species.

The expansion of the wings is 21 mm. The forewings' general ground colour is a medium reddish-brown with the veins faintly clouded with ochreous-brown and dotted irregularly by small clumps of very dark reddish-brown scales; the costa, especially towards the base, barred with dark reddish-brown; a broad longitudinal ochreous band extends from the base to the apex; it is broadest near the centre, then sharply constricted on lower margin; at about two-thirds it is distinctly broken and continues upward to apex gradually narrowing; a similar short narrow line extends from base to about one-third along costa, and a faint cloudy-ochreous shading extends across the break in the longitudinal line between it and the costa. The breadth of the ochreous line varies towards the apex and in one specimen almost disappears. Hind wings paler reddish-brown. Cilia of the forewings medium ochreous-brown, of the hind wings light ochreous. Antennae reddish-brown, hairy; head and palps strongly scaled with reddish-brown scales; thorax darker brown suffused with reddish-brown and ochreous scales; patagia dark-brown suffused with ochreous and distinctly reddish basally; abdomen ochreous sparsely suffused with dark-brown scales; front and middle legs dark-brown suffused with ochreous, hind legs ochreous suffused with brown.

Locality: Great Island, Three Kings; Tasman Valley on tea-tree.

Type: In Auckland Museum Collection; paratype in Dominion Museum Collection.

Another somewhat unusual form of this moth also was included in the collection, in which the forewings are pale-reddish-ochreous irregularly speckled with small black spots. However, this form is known also from the mainland.

The other species recorded in the collection (taken at light) were: *Diptychophora selenaca*, *Selidosema suavis*, *Melanchra lignana*.

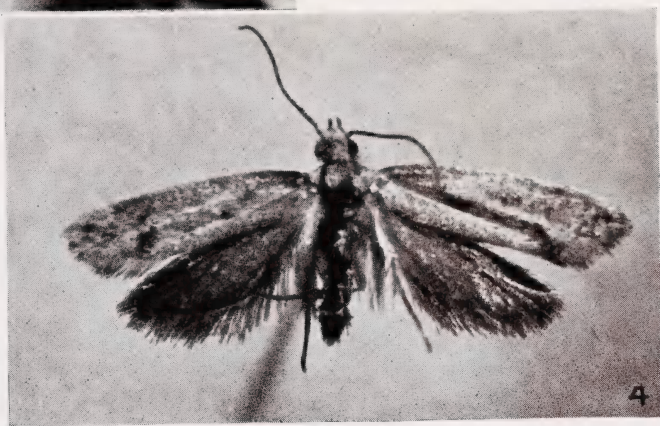


Fig. 1. *Porina unimaculata* n. sp. type.

Fig. 2. *Ctenopsutis obliquana distincta* n. subsp. Type above, paratype below..

Fig. 3. *Heliostibes bilineata* n. sp. type.

Fig. 4. *Lysiphragma argentaria* n. sp.

Photo, J. T. Salmon.